

Autophakoscopy

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In No. 1 of Vol. V, of the *Annals of Ophthalmology*, there appears a short article written by me on autophakoscopy, as practiced by the aid of a polished convex surface (a plain gold ring). This article closes with these words: "That, inasmuch as this observation was made in such a peculiar manner, and from rays of light reflected from a convex surface of an opaque substance, there might be in it greater possibilities for some one who possessed the time and inclination to further pursue this interesting subject." Hence it will be seen that I did not then intend to make any further investigations along this line. I am sure I should not have written again upon this theme, were it not for the fact that the phenomenon, the particulars of which I shall presently relate, so frequently and persistently attracted my attention that I have felt impelled to relate my experience. The discovery of this method was brought about by an accident. Nothing more serious, however, than having the right lens of my eyeglasses well sprinkled with some of the fluid with which I was spraying a patient's nose, an accident that has doubtless happened to all when similarly engaged, provided they were wearing glasses at the time.

When looking directly at the arc light on the street corner near my office, through the lens to which small globules of the fluid were clinging, I saw the luminous disc mentioned by Dr. Darier, with great clearness, and of such increased size that all observations were greatly facilitated. These particulars were especially noticeable whenever a little effort was made to bring a large globule in the direct line of vision. The appearance of the physiological floating bodies in the vitreous, as seen by this experiment, is very striking and beautiful. A sudden movement of the eyeball imparts to them a motion like the undulations of a perfectly limpid fluid, like what may be witnessed when alcohol is poured in a glass of clear water when it is held up to the light.

There is a golden tinge to the luminous disc as produced by Dr. Darier's experiment, as well as by the one mentioned in my previous article, that is entirely absent here, so that the outline of all floating

bodies in the vitreous could not be seen any more perfectly if they were under the microscope. The stria in the crystalline lens and the movement of drops of mucus and tears across the surface of the cornea, are not seen by this experiment; it is only possible to watch the movement of the *muscæ volitantes*. Just why this is so I am unable to explain. To designate this procedure as autophakoscopy is evidently a misnomer, since the stria in the crystalline lens is not seen; this body being one part of the eye that escapes our scrutiny when practicing this method. But for the want of a better name I decided to publish this article under the old title.

The result of several experiments have fully satisfied me that autophakoscopy by this method may be practiced with any lens, provided it is held before the eye in the same position as when used for visual purposes, and is one that in no way interferes with acuteness of vision. A globule of water or colorless liquid albolene, adhering to the outer surface of the lens, is the essential part of the apparatus used in the production of this peculiar phenomenon.

Autophakoscopy, however practiced, does not seem to possess any features that tend to make it of value to the ophthalmologist in clinical work. It does not "fill a long-felt want" as did ophthalmoscopy for our fathers, and as skiascopy and ophthalmometry have done for the modern oculist. It is doubtless destined to occupy about the same position as to usefulness in the realm of science, as is accorded the butterfly in the realm of nature.

